

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application.

Claim 1 (Currently Amended): A touch panel device comprising:

a touch panel for detecting a touched position; and  
a lighting device including a light source, a light guiding part on which light is incident from said light source, and a light guiding and emitting part for guiding light propagated through said light guiding part so as to emit the light as planar planner light to an outside,  
wherein the light to be guided to the outside from said light guiding and emitting part is emitted from a side opposite to a side on which the touched position is to be detected,  
wherein said light guiding and emitting part propagates an ultrasonic wave through an optically transparent substrate and senses a change in a propagation state of the ultrasonic wave due to a touch of an object with said substrate so as to detect a position where the object is touched.

Claim 2 (Cancelled)

Claim 3 (Original): The touch panel device according to claim 1, wherein  
said touch panel senses a change in resistance of a resistance film due to a touch of an object with said resistance film so as to detect a position where the object is touched.

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

Claim 4 (Original): The touch panel device according to claim 1, wherein  
said light guiding and emitting part is a step-like structure formed on said light guiding  
part.

Claim 5 (Original): The touch panel device according to claim 4, wherein  
a formation direction of the step-like structure forms an angle of not more than 32.5° with  
respect to a normal direction of a face of said light guiding part.

Claim 6 (Original): The touch panel device according to claim 1, wherein  
an optical refractive index of said light guiding and emitting part is not less than an  
optical refractive index of said light guiding part.

Claim 7 (Original): The touch panel device according to claim 1, wherein  
said light guiding and emitting part is a plurality of protrusions formed on said light  
guiding part.

Claim 8 (Original): The touch panel device according to claim 7, wherein  
an optical refractive index of said protrusions is not less than an optical refractive index  
of said light guiding part.

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

Claim 9 (Original): The touch panel device according to claim 1, wherein  
said light guiding and emitting part is a plurality of grooves formed in said light guiding  
part.

Claim 10 (Original): The touch panel device according to claim 9, wherein  
a formation direction of said grooves forms an angle of 35° to 55° with respect to a  
normal direction of a face of said light guiding part.

Claim 11 (Original): The touch panel device according to claim 1, wherein  
said light guiding and emitting part is a plurality of prisms formed on said light guiding  
part.

Claim 12 (Original): The touch panel device according to claim 1, further comprising an  
adhesive agent layer for bonding said substrate of said touch panel and said light guiding part of  
said lighting device together.

Claim 13 (Original): The touch panel device according to claim 12, wherein,  
when optical refractive indices of said substrate, said light guiding part, and said adhesive  
agent layer are indicated by n1, n2, and n3, respectively, the optical refractive indices n1, n2, and  
n3 satisfy the following conditions:

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

$n_1 \doteq n_3 \doteq n_2$ .

Claim 14 (Original): The touch panel device according to claim 1, further comprising an adhesive agent layer for bonding said touch panel and said light guiding part together.

Claim 15 (Original): The touch panel device according to claim 14, wherein, when optical refractive indices of said touch panel, said light guiding part, and said adhesive agent layer are indicated by  $n_1$ ,  $n_2$ , and  $n_3$ , respectively, the optical refractive indices  $n_1$ ,  $n_2$ , and  $n_3$  satisfy the following conditions:

$n_1 \doteq n_3 \doteq n_2$ .

Claim 16 (Currently Amended): A touch panel device in which an ultrasonic wave is propagated through an optically transparent substrate and a change in a propagation state of the ultrasonic wave due to a touch of an object with said substrate is sensed to detect a position where the object is touched, comprising:

a light source for emitting light which is to be incident on said substrate; and  
a light guiding and emitting part for guiding the light incident on said substrate from said light source so as to emit the light to an outside, wherein

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

said light guiding and emitting part is configured so that the light incident on said substrate from said light source is guided and emitted to the outside from a face of said substrate opposite to a face where the touched position is to be detected.

Claim 17 (Cancelled)

Claim 18 (New): A touch panel device comprising:

    a touch panel for detecting a touched position; and  
    a lighting device including a light source, a light guiding part on which light is incident from said light source, and a light guiding and emitting part for guiding light propagated through said light guiding part so as to emit the light as planner light to an outside,  
    wherein the light to be guided to the outside from said light guiding and emitting part is emitted from a side opposite to a side on which the touched position is to be detected, wherein  
        said light guiding and emitting part is a step-like structure formed on said light guiding part.

Claim 19 (New): The touch panel device according to claim 18, wherein  
    said touch panel senses a change in resistance of a resistance film due to a touch of an object with said resistance film so as to detect a position where the object is touched.

Response Under 37 C.F.R. § 1.111  
Application No. 10/642,640  
Attorney Docket No. 030931

Claim 20 (New): The touch panel device according to claim 18, further comprising an adhesive agent layer for bonding said substrate of said touch panel and said light guiding part of said lighting device together.

Claim 21 (New): The touch panel device according to claim 20, wherein, when optical refractive indices of said substrate, said light guiding part, and said adhesive agent layer are indicated by n1, n2, and n3, respectively, the optical refractive indices n1, n2, and n3 satisfy the following conditions:

$$n1 \neq n3 \neq n2.$$

Claim 22 (New): The touch panel device according to claim 18, further comprising an adhesive agent layer for bonding said touch panel and said light guiding part together.

Claim 23 (New): The touch panel device according to claim 22, wherein, when optical refractive indices of said touch panel, said light guiding part, and said adhesive agent layer are indicated by n1, n2, and n3, respectively, the optical refractive indices n1, n2, and n3 satisfy the following conditions:

$$n1 \neq n3 \neq n2.$$